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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,729	10/29/2003	Hoang T. Tran	1875.4520000	4015

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EXAMINER

SUN, SCOTT C

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,729

Applicant(s)

TRAN ET AL.

Examiner

Scott Sun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/1/2003 8/17/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7; 12-30, drawn to a plurality of programmable pads capable of supporting at least two standards, classified in class 710, subclass 8.
 - II. Claims 8-11, drawn to a bus, classified in class 710, subclass 315.
2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination, group I, as claimed does not require the particulars of the subcombination, group II, as claimed because the claimed programmable pads can support multiple data protocols and electrical standards with a plurality of bus configurations based on design choice, not necessarily with the claimed bus configuration. The subcombination has separate utility such as intra-system data transferring.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Kendrick Patterson (Reg. No. 45,321) on 08/16/2005 a provisional election was made with traverse to prosecute the invention of group I, claims 1-7, 12-30. Affirmation of this election must be made by the applicant in

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to this office action. Claims 8-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-2; 5-6; 12, 18, and 25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6-7; 12-13, 15 of copending Application No. 10/694788. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both recite a transceiver, comprising: a plurality of pads, wherein at least one of said plurality of pads is a programmable pad capable of supporting at least two standards; a plurality of ports in communications with said plurality of pads, wherein one of said plurality of ports is a parallel port in communications with said programmable pad; and means for enabling communications between a first port from said plurality of ports with a second port from said plurality of ports; one of said plurality of ports is a serial port in communications with said programmable pad; wherein said serial port is XAUI. The

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only differences between the above claims of the instant applicant and claims of the copending application being that the instant application recites sending and receiving data at said programmable pad in accordance with said data protocol while the claims of the copending application lack such limitation. However, it would be obvious to one of ordinary skill in the art to configure the pad of the copending application to be able to both send and receive data for the benefit of supporting the functions of the transceiver, which by definition is capable of both sending and receiving data. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 18-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "said electrical specification" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claims 19-24 are rejected because of their dependency on the above rejected claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7; 12-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al. (Patent # 4833605) and further in view of Turner (electronic document at http://www.ieee802.org/3/efm/public/sep01/turner_1_0901.pdf).

As per claim 1, Terada discloses a transceiver, comprising a plurality of pads
(figure 1)

A plurality of ports in communications with said plurality of pads, wherein one of said plurality of ports is a parallel port in communications with said programmable pad; and (Column 4, lines 35-36; figure 1)

Means for enabling communications between a first port from said plurality of ports with a second port from said plurality of ports (Column 4, lines 48-49; figure 1)

Terada does not disclose expressly wherein at least one of said plurality of pads is a programmable pad capable of supporting at least two standards;

Turner discloses a programmable pad capable of supporting at least two standards (slide 19-20)

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As per claim 3, Terada does not disclose expressly the transceiver of claim 1, wherein said programmable pad is programmable to operate as an input or an output.

Turner discloses a programmable pad is programmable to operate as an input or an output (slide 4)

As per claim 4, Terada does not disclose expressly programmable pad is programmable to receive or send at least one of data signal and a clock signal (slide 5)

As per claim 5, Terada discloses the transceiver of claim 1, wherein one of said plurality of ports is a serial port in communications with said programmable pad (figure 1)

As per claim 6, Terada does not disclose expressly the transceiver of claim 5, wherein said serial port is XAUI.

Turner discloses a programmable pad in communications with a XAUI serial port (slide 13)

As per claim 7, Terada does not disclose expressly the transceiver of claim 1, wherein one of said plurality of pads is a MDIO pad programmable to support at least two electrical specifications and at least two data protocols.

Turner discloses a MDIO pad programmable to support at least two electrical specifications and at least two data protocols (slide 19-20)

Terada's invention and Turner teachings are from the same art of communication peripherals.

At the time of invention, it would have been obvious to a person of ordinary skill to replace part of the bus architecture of Terada's invention with Turner's MDIO pad for the benefit of simplified connection between a management entity (e.g. a port controller) and a managed PHY (e.g. a port)

As per claim 2, the examiner finds it obvious to implement the various newer protocols and electrical standards in Terada's invention because it is well known in the art to modify older systems to correspond to newer standards.

As per claim 13 and 14, the examiner finds it obvious to implement a timing controller and associated instruction register because it is well known in the art to implement such a variable delay unit to provide high-speed data transfer synchronization.

As per claim 17, the examiner finds it obvious to implement a testing register for sending a test message to measure leakage current from at least one of said programmable pads because it is well known in the art to measure the IDDQ (quiescent power-supply current) for the purpose of fault detection.

As per claims 12, 15-16, 18-30, the examiner finds these claims differ from the above rejected claims only in statutory category or parent claim, and therefore recite the same limitations as the above claims. They are rejected using the same arguments provided in rejection of the above claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Sun whose telephone number is (571) 272-2675. The examiner can normally be reached on M-F, 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TAMMARA PEYTON
PRIMARY EXAMINER

SS

8/17/2005